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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/072,620 | 02/08/2002 | Takayuki Yamagishi | ASMJP.103AUS | 3105 |

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EXAMINER

KRAMER, DEAN J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3652

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,620

Applicant(s)

YAMAGISHI ET AL

Examiner

Dean J. Kramer

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 2, 3, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 8 are confusing in that it is unclear what is being "switched" between the two exhaust ports.

Further, in claim 11, the exact meaning of the phrase "by comprising said interior surface of said reaction chamber of an insulating material" is not clearly understood.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-12, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Iwabuchi.

Iwabuchi shows a wafer processing system comprising a load lock chamber (20), a transfer chamber (10), a reaction chamber (1) formed with an insulated cover (6), a wafer transfer assembly (15), and a separating plate (59) wherein an inactive gas is continuously introduced into the transfer chamber through pipe (12). Regarding claim

11, it is noted that the reaction tube (1) is formed of quartz which would inherently prevent "deposition" on the interior surface thereof during a cleaning process or the like.

4. Claims 1-3 and 7-9, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Saito.

Saito shows a wafer treatment assembly comprising a load lock chamber (1), a transfer chamber (5), a reaction chamber (6), and a wafer transfer assembly (3).

5. Claims 1-12, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Takanabe et al..

The patent to Takanabe et al. shows a load lock chamber (400A), a transfer chamber (200A), a reaction chamber (100A) formed of quartz, an insulating plate (23), and a transfer arm (3).

6. Claims 1-3 and 7-9, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner et al..

The Wagner et al. patent shows a wafer handling system comprising a load lock chamber (1), a transfer chamber (15), a reaction chamber (24,25), and wafer transfer arms (10,20).

Specification

7. The disclosure is objected to because of the following informalities: On pages 4 (lines 5 and 6) and 6 (line 5), there appears to be missing text describing certain Japanese patent applications. Appropriate correction is required.


Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Binnard et al. shows a wafer chamber layered with insulating material in order to maintain internal atmospheric purity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean J. Kramer whose telephone number is (703) 308-2181. The examiner can normally be reached on Mon., Tues., Thurs., Fri. (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (703) 308-1113. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Dean J. Kramer 8-25-03
Primary Examiner
Art Unit 3652

Djk
8/25/03